

## PATENT ABSTRACTS OF JAPAN

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(71)Applicant : **TOPPAN PRINTING CO LTD**

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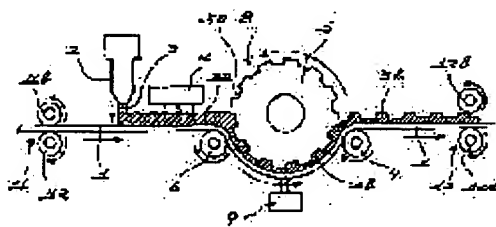
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### **(54) PRODUCTION OF EMBOSSED SHEET BY IRRADIATION WITH IONIZING RADIATION**

(57)Abstract:

**PURPOSE:** To produce an embossed sheet having good emboss reproducibility by curing a prepolymer using ultraviolet rays and electron beam while enabling the sitting of a relatively easy embossed sheet producing condition and suppressing the generation of the resin bank of the prepolymer.

**CONSTITUTION:** A method for producing an embossed sheet by the irradiation with ionizing radiation contains a process applying an ionizing radiation curable resin 3 to a running base sheet 1, a precuring process semi-curing the ionizing radiation curable resin of the base sheet by an ultraviolet irradiation means 4 and an emboss curing process winding the semicured ionizing radiation curable resin on the surface of the base sheet around the peripheral surface of an embossing roll 5 to cure the same by an electron beam radiation means 9.



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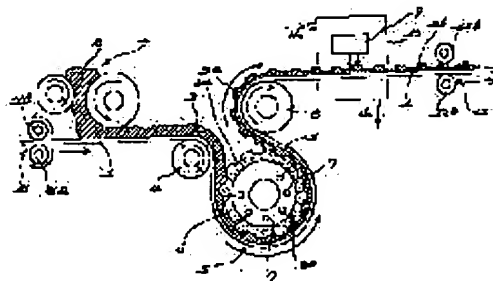
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ISHIKAWA TAKASHI**

### (54) EMBOSS FORMING METHOD BY IONIZING RADIATION APPLICATION

(57)Abstract:

**PURPOSE:** To prevent the wrapping of foams in resin generated by sudden application and improve the embossing speed by making the diameter of a sheet emboss type roll small and reducing the application amount of ultraviolet rays during the time of being in contact with the emboss type roll.

**CONSTITUTION:** The emboss forming method by ionizing radiation application comprises the process of applying ionizing radiation curing resin 3 on a traveling base sheet face, the process of semi-cured resin and embossing by means of an ultraviolet applying means 7 for applying ultraviolet rays to the resin face from the inner face side of the emboss type roll while the applied resin is pressed and



brought into contact with the peripheral face of the emboss type roll 6 composed of glass or a synthetic resin material transmitting ultraviolet rays, and the process of releasing the emboss semi-cured resin off the emboss type roll together with a base sheet and curing the emboss semi-cured resin by means of an electron beam application means 9.

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